7-26-04

IFW

JUL 2 3 2004

PTO/SB/21 (04-04)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL
FORM

Application Number 10/717,785

Filing Date 11/20/2003

First Named Inventor Richard Veil et al.

Art Unit

Examiner Name Total Number of Pages in This Submission Attorney Docket Number 4965-000168 ENCLOSURES (check all that apply) After Allowance Communication to Fee Transmittal Form Drawing(s) Technology Center (TC) Appeal Communication to Board of Fee Attached Licensing-related Papers Appeals and Interferences Petition Appeal Communication to TC Amendment / Reply (Appeal Notice, Brief, Reply Brief) Petition to Convert to a After Final Proprietary Information Provisional Application Power of Attorney, Revocation Affidavits/declaration(s) Status Letter Change of Correspondence Address Terminal Disclaimer Other Enclosure(s) Extension of Time Request (please identify below): English translation of Request for Refund International Preliminary Express Abandonment'Request CD, Number of CD(s) **Examination Report; and** postcard. ☐ Information Disclosure Statement The Commissioner is hereby authorized to charge any additional Remarks Certified Copy of Priority fees that may be required under 37 CFR 1.16 or 1.17 to Deposit Document(s) Account No. 08-0750. A duplicate copy of this sheet is enclosed. Response to Missing Parts/ Incomplete Application Response to Missing Parts under 37 CFR 1.52 or 1.53 SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT Reg. No. Attorney Name Firm Harness, Dickey & Pierce, P.L.C. Christopher M. Brock 27313 Individual name Signature Date July 23, 2004

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Typed or printed name	Christopher M. Brock	Express Mail Label No.	EV 533 146 585 US (7/23/2004)
Signature	Kuntola M. Broch	Date	July 23, 2004

This collection of information is required by 37 CFR 1.5. We information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Translation

PATENT COOPERATION TREATY



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 4035P130WO - ML/ha	FOR FURTHER ACTION See N Prelimin	RACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)					
International application No. PCT/EP2002/002840	International filing date (day/month/yea. 14 March 2002 (14.03.2002)						
International Patent Classification (IPC) or national classification and IPC F16P 3/00 14 March 2002 (14.03.2002) 22 May 2001 (22.05.2001) F16P 3/00							
Applicant PILZ GMBH & CO.							
PILZ GMBH & CO. 1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36. 2. This REPORT consists of a total of							
Date of submission of the demand Date of completion of this report							
12 December 2002 (12.12.	2002) 14	14 August 2003 (14.08.2003)					
Name and mailing address of the IPEA/EP	Authorized officer						
Facsimile No.	Telephone No.						

Form PCT/IPEA/409 (cover sheet) (July 1998)

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP2002/002840

I. Basis of the report							
1. With regard to the elements of the international application:*							
	the international application as originally filed						
	\overline{X}	the des	scription:				
1 -		pages	1.17				
Ì		pages	1-16	, as originally filed			
I		pages	, filed with the letter of	, filed with the demand			
	∇	the cla					
"		pages					
		pages		, as originally filed			
		pages	, as amended (together with any				
		pages		, filed with the demand			
_	7	, filed with the letter of					
		the drav	wings:				
		pages	1/3-3/3	, as originally filed			
		pages		, filed with the demand			
_	_	pages	, filed with the letter of				
L	the	e seque	nce listing part of the description:				
	1	pages		es originally filed			
	I	pages .		filed with the demand			
	I	pages .	, filed with the letter of	, med with the demand			
	nese e	element the lang the lang	guage of a translation furnished for the purposes of international search (under Rule 23.1(b) guage of publication of the international application (under Rule 48.3(b)). Guage of the translation furnished for the purposes of international preliminary examinates.	which is:			
3. W	، آ	containe	to any nucleotide and/or amino acid sequence disclosed in the international app amination was carried out on the basis of the sequence listing: ed in the international application in written form.	lication, the international			
filed together with the international application in computer readable form.							
<u> </u>			d subsequently to this Authority in written form.				
<u> </u>			d subsequently to this Authority in computer readable form.				
	¬ ¨		tement that the subsequently furnished written sequence listing does not go beyon onal application as filed has been furnished.				
	J T	he state een furi	ement that the information recorded in computer readable form is identical to the writing that the information recorded in computer readable form is identical to the writing that the information recorded in computer readable form is identical to the writing that the information recorded in computer readable form is identical to the writing that the information recorded in computer readable form is identical to the writing that the information recorded in computer readable form is identical to the writing that the information recorded in computer readable form is identical to the writing that the information recorded in computer readable form is identical to the writing that the information recorded in the information rec	itten sequence listing has			
. [] т	he ame	ndments have resulted in the cancellation of:				
			e description, pages				
			e claims, Nos.				
			e drawings, sheets/fig	İ			
	Th bey	is repo	rt has been established as if (some of) the amendments had not been made, since they have disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**	we been considered to go			
and	70.17	7).	eets which have been furnished to the receiving Office in response to an invitation under , is "originally filed" and are not annexed to this report since they do not contain to	amendments (Rule 70.16			
Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.							

The above features are novel and industrially applicable and involve an inventive step, since none of the cited documents contains anything that suggests them.

- Dependent Claims 2 to 10 contain advantageous embodiments of the safety switching module according to Claim 1 and therefore likewise meet the relevant requirements.
- 3. Claim 11 describes a method that corresponds to the above module and involves the following steps:
 - providing a first current path having at least one switching element;
 - providing a second current path having at least one switching element parallel to the first current path; and
 - alternatingly testing the switching-off capacity of one of the two current paths, the current path that is not being tested supplying the load alone.

This method is likewise novel and industrially applicable and involves an inventive step, since none of the cited documents contains anything that suggests it.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/EP 02/02840

v.	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement					
1.	Statement					
	Novelty (N)	Claims	1-11	YES		
		Claims		NO		
	Inventive step (IS)	Claims	1-11	YES		
		Claims		NO NO		
	Industrial applicability (IA)	Claims	1-11	YES		
		Claims		NO		

Citations and explanations

1. Claim 1 relates to a safety switching module having a first and second switch control device, and a first switching element and a second switching element connected in series thereto, the first switching element being controllable by the first switch control device and the second by the second switch control device, and it being possible to test the switching-off capacity of at least one switching element using an evaluation and control device.

Modules of this type are known in general.

In order to enable the switching-off capacity of the switching elements to be tested also for large currents to be switched and/or capacitive or inductive loads, third and fourth switching elements are provided that are arranged in series with respect to each other and in parallel to the first series connection and form a second current path, the third switching element being controllable by the first switch control device and the fourth switching element by the second switch control device, and the evaluation and control device testing the switching elements alternatingly in one of the current paths.